

**RECEIVED
CENTRAL FAX CENTER**

JUL 10 2008

Serial No. 10/827,238
Docket No. F-13110

2

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Withdrawn) A fingerprint authentication system comprising:
 - a fingerprint registration data section in which pieces of fingerprint data are registered;
 - a fingerprint read section which reads one fingerprint data;
 - a fingerprint collation section which inspects whether fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section; and
 - a control section which replaces the fingerprint data that is registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section, with the fingerprint data read by the fingerprint read section if the fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section.
2. (Currently Amended) A fingerprint authentication system, comprising:
 - a fingerprint registration data section in which pieces of fingerprint data are registered;
 - a fingerprint read section which reads one fingerprint data;
 - a fingerprint collation section which inspects whether fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section;
 - a control section which registers the fingerprint data read by the fingerprint read section in the fingerprint registration data section additionally to the fingerprint data that is

Serial No. 10/827,238

3

Docket No. F-13110

registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section if the fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section; and

deletion means for deleting the fingerprint data having a general similarity that is highest among the pieces of fingerprint data registered in the fingerprint registration data section, from the fingerprint registration section.

3. (Previously Presented) The fingerprint authentication system according to claim 2, wherein the deletion means deletes the fingerprint data having the general similarity that is highest among the pieces of fingerprint data registered in the fingerprint registration data section, when a number of the fingerprint data registered in the fingerprint registration data section exceeds a predetermined number.

4. (Original) The fingerprint authentication system according to claim 3, further comprising:

general similarity calculation means for calculating similarities between each of the pieces of fingerprint data registered in the fingerprint registration data section and the fingerprint data other than the each fingerprint data, respectively, and for calculating the general similarity based on the similarities.

5. (Withdrawn) A fingerprint authentication method comprising:
registering pieces of fingerprint data in a fingerprint registration data section;
reading one fingerprint data;

Serial No. 10/827,238

4

Docket No. F-13110

inspecting whether fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section; and

replacing the fingerprint data that is registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section, with the fingerprint data read by the fingerprint read section if the fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section.

6. (Currently Amended) A fingerprint authentication method, comprising:

registering pieces of fingerprint data in a fingerprint registration data section;

reading one fingerprint data;

inspecting whether fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section;

registering the fingerprint data read by the fingerprint read section in the fingerprint registration data section additionally to the fingerprint data that is registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section if the fingerprint data that matches or almost matches to the fingerprint data read by the fingerprint read section is registered in the fingerprint registration data section; and

deleting the fingerprint data having a general similarity that is highest among the pieces of fingerprint data registered in the fingerprint registration data section, from the fingerprint registration data section.

Serial No. 10/827,238

5

Docket No. F-13110

7. (Previously Presented) The fingerprint authentication method according to claim 6,

wherein deleting occurs when a number of the number of the fingerprint data registered in the fingerprint registration data section exceeds a predetermined number.

8. (Previously Presented) The fingerprint authentication method according to claim 7,

further comprising:

calculating similarities between each of the pieces of fingerprint data registered in the fingerprint registration data section and the fingerprint data other than the each fingerprint data, respectively, and for calculating the general similarity based on the similarities.

9. (Withdrawn) The fingerprint authentication system according to claim 4, wherein the general similarity is calculated based on a sum of a predetermined number of similarities of each fingerprint data.

10. (Previously Presented) The fingerprint authentication system according to claim 4, wherein the general similarity is calculated based on a mean square of a predetermined number of similarities of each fingerprint data.

11. (Currently Amended) The fingerprint authentication system according to claim 9, wherein the predetermined number of similarities of each fingerprint data is determined by calculating the similarity between two of a predetermined pieces of registered fingerprint data ~~plus one of registered fingerprint data~~ for all combinations of a selection of two pieces of data from the predetermined pieces ~~plus one pieces-piece~~ of data.

12. (Withdrawn-Currently Amended) The fingerprint authentication system according

Serial No. 10/827,238
Docket No. F-13110 (YAS.048)

6

to claim 1, wherein the control section replaces the fingerprint data that is registered in the fingerprint registration data section in accordance to a growth of the fingerprint data.

13. (Currently Amended) The fingerprint authentication according to claim 2, wherein the control section registers the fingerprint data read by the fingerprint read section in the fingerprint registration data section additionally to the fingerprint data that is registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section in accordance with a seasonal variation on the fingerprint data.

14. (Withdrawn) The fingerprint authentication method according to claim 8, wherein the general similarity is calculated based on a sum of a predetermined number of similarities of each fingerprint data.

15. (Previously Presented) The fingerprint authentication method according to claim 8, wherein the general similarity is calculated based on a mean square of a predetermined number of similarities of each fingerprint data.

16. (Currently Amended) The fingerprint authentication system according to claim 14, wherein the predetermined number of similarities of each fingerprint data is determined by calculating the similarity between two of a predetermined pieces of registered fingerprint data ~~plus one of registered fingerprint data~~ for all combinations of a selection of two pieces of data from the predetermined pieces plus one ~~pieces~~ piece of data.

Serial No. 10/827,238

7

Docket No. F-13110 (YAS.048)

17. (Withdrawn) The fingerprint authentication system according to claim 5, wherein replacing the fingerprint data that is registered in the fingerprint registration data section occurs in accordance to growth of the fingerprint data.

18. (Previously Presented) The fingerprint authentication according to claim 6, wherein registering the fingerprint data read by the fingerprint read section in the fingerprint registration data section additionally to the fingerprint data that is registered in the fingerprint registration data section and that matches or almost matches to the fingerprint data read by the fingerprint read section occurs in accordance with seasonal variation on the fingerprint data.